CRS Backup Live Operations

Some sites like to use the CRS Backup Live (BUL) capability to broadcast a live, running commentary during severe weather events. The BUL mode of operation was designed for backup of CRS software failure only; it was not designed as a means of broadcasting live to the public. The following is an excerpt from Section 3.4.2 (Backup Live Operations) of the CRS Site Operator's Manual (June 2003)**: "The following are the step-by-step procedures for performing backup live operations. This information is provided in the event the CRS software fails completely, and you need to broadcast manually in backup live mode."** Please note there is no mention of using BUL for a live broadcast.

If BUL is used to broadcast live, a problem could occur like the following scenario:

> *An automated tornado warning is generated and broadcast on a transmitter. Before the initial transmission of the warning is completed, i.e. before the NWRSAME end tones are transmitted, the operator interrupts the tornado warning to transmit live via the CRS Backup Live (BUL) capability. When in BUL mode, the operator's microphone input is routed directly to the selected transmitters completely circumventing all CRS computer components. The CRS broadcast continues, but all output spills onto the floor. Therefore, the NWRSAME end tones for the automated tornado warning are not broadcast, which could have negative impact on the EAS.*

The appropriate means of broadcasting live to the public for a short period of time is the CRS Emergency Override (EO) capability. The EO capability is managed by the CRS software and is capable of coordinating the interruption of a toned warning. In the above scenario, if the operator had used EO instead of BUL, the software would have immediately transmitted the NWRSAME end tones for the interrupted warning and then continued with the live broadcast via EO. At the conclusion of the EO session, the interrupted tornado warning would have been rebroadcast, complete with start and end NWRSAME tones.

The live EO broadcast may be saved and scheduled for subsequent repeated transmission. Therefore, the live EO broadcast is saved to disk. Because the digitized voice recording of the live broadcast may be quite large, the maximum live broadcast time is four minutes. Therefore EO cannot be used for extended live broadcasts. CRS was not designed with an extended live broadcast requirement.

Since the BUL mode of operation is by definition a manual override of the automated CRS software scheduling process, the operator must ensure that the initial broadcast of a warning has been completely transmitted before commencing the BUL broadcast. Given the current CRS design, there is no system solution to this problem, short of a major re-design. The planned CRS Replacement System would be the appropriate place to address a specific and detailed live broadcast requirement.